

CLAIMS

1. Use of Aan antibody or antibody fragment specific for CD38 ~~for use~~ in the treatment of autoantibody-mediated membranous nephropathy, wherein the autoantibody-mediated membranous nephropathy comprises anti-PLA2R and/or anti-THSD7a antibodies.

~~2. The antibody or antibody fragment for use according to claim 1, wherein the autoantibody-mediated membranous nephropathy is an anti-PLA2R and/or anti-THSD7A positive membranous nephropathy.~~

23. The ~~antibody or antibody fragment for~~ use according to ~~any of the preceding claims 1,~~ wherein the antibody depletes plasma cells by ADCC and/or ADCP.

34. The ~~antibody or antibody fragment for~~ use according to any of the preceding claims, wherein the antibody ~~shows a significant higher~~exhibits specific cell killing ~~on~~of CD38 ~~expressing antibody-secreting~~ plasma cells of at least 20% and wherein the antibody exhibits cell killing of~~than~~ ~~on~~ CD38 low expressing antibody-non-secreting cells (e.g. NK cells) of less than 20%.

45. The ~~antibody or antibody fragment for~~ use according to any of the preceding claims, wherein antibody administration leads to a reduction of endogenous autoantibody titers.

56. The ~~antibody or antibody fragment for~~ use according to claim 45, wherein said endogenous autoantibody titers comprise anti-PLA2R and/or anti-THSD7A autoantibodies.

67. The ~~antibody or antibody fragment specific for CD38 for~~ use according to any of the preceding claims, wherein said antibody or antibody fragment specific for CD38 is a human antibody.

78. The ~~antibody or antibody fragment specific for CD38 for~~ use according to any of the preceding claims, wherein said antibody or antibody fragment specific for CD38 is an IgG1.

89. The ~~antibody or antibody fragment specific for CD38 for~~ use according to any of the preceding claims, wherein the antibody comprises a HCDR1 region of amino acid sequence SEQ ID NO.: 1, a HCDR2 region of amino acid sequence SEQ ID NO.: 2, a HCDR3 region of amino acid sequence SEQ ID NO.: 3, and a LCDR1 region of amino acid sequence SEQ ID NO.: 4, a LCDR2 region of amino acid sequence SEQ ID NO.: 5 and a LCDR3 region of amino acid sequence SEQ ID NO.: 6.

910. The ~~antibody or antibody fragment specific for CD38 for~~ use according to any of the preceding claims, wherein said antibody or antibody fragment specific for CD38 comprises a variable heavy chain region of SEQ ID NO.: 7 and a variable light chain region of SEQ ID NO.: 8.

1011. The ~~antibody or antibody fragment for~~ use according to any of the preceding claims, in combination with a further therapeutic agent.

1112. The ~~antibody or antibody fragment for~~ use according to claim 1011, wherein the further therapeutic agent is an agent for the prophylaxis and/or treatment of autoantibody-mediated autoimmune disease.

1213. The ~~antibody or antibody fragment for~~ use according to claim 1112, wherein the further therapeutic agent is an immunosuppressive drug such as dexamethasone, azathioprine, mycophenolic acid, methotrexate or a proteasome inhibitor such as bortezomib.

1314. The ~~antibody or antibody fragment for~~ use according to any of the preceding claims, wherein the antibody or antibody fragment is to be administered intravenously.

1415. The ~~antibody or antibody fragment for~~ use according to any of the preceding claims, wherein the antibody or antibody fragment ~~will~~ is to be administered in the first treatment cycle at 16 mg/kg once weekly.